FEASIBILITY STATEMENTS FOR BLACK BEAR GOALS AND OBJECTIVES

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For Wildlife Management Districts 1-23 and 25-28¹

Goal: Provide hunting, trapping and viewing opportunity for bears.

Objective 1: Stabilize the bear population by 2005 at no less than current (1999) levels, through annual hunting and trapping harvests.

<u>Desirability</u>: To attain this objective, both hunting opportunity and annual harvests will increase, with a corresponding rise in hunting satisfaction. There appears to be solid support for increased bear hunting opportunity among Registered Maine Guides, and likely both resident and nonresident bear hunters.

Feasibility: In the short term, the objective can be attained by a moderate increase in harvest size. Harvests during the 1990s averaged 2,408 bears annually. Further analysis is required to refine harvest objectives, but an increase of about 10-30%, to about 3,000-3,500 bears, is a reasonable estimate of the harvest size needed to stabilize population growth. Declining hunter numbers and effort, and recent efforts to stop the use of dogs and bait to hunt bears elsewhere in North America, could lead to reduced bear harvests in Maine. Therefore, innovative changes in harvest regulations may be required to generate the increased harvest size needed to achieve the objective. The Department will also need to improve its capability to monitor the bear population and hunting harvests, to detect and respond to changes in population status. Additional monitoring efforts would likely involve periodic statewide mark-recapture programs, involving the placement of baits with ingestible bio-markers every 4-5 years (to estimate population size), annual sampling of the hunter-killed bears (i.e., premolar collections, physical measurements to track age of first litter production, and indices to determine the proportion of females breeding), and developing a means to determine male bear survival and densities across the state. These efforts will be required in addition to the ongoing monitoring of radio-collared females on study areas, for several years, or until less expensive measures of densities, reproduction, and survival are developed. Consequently, additional seasonal help and funding will be needed to achieve the objective.

<u>Capability of Habitat</u>: The population is below carrying capacity, and bear populations are not known to negatively impact their habitat. There are no immediate habitat concerns, except for the threat of a potential widespread loss of nut-bearing beech trees through excessive cutting or disease. If this occurs, bear

¹ Wildlife Management Districts 24 and 30 have high human populations and fragmented forests that are largely unsuitable as bear habitat. Consequently, the public working group did not develop goals and objectives for these districts.

productivity will probably decline markedly in the Forest Region (WMD 1, 2, 4, 5, 7, 8, 9, 10, 14, 18 and 19) where bear reproductive success is linked to beechnut crops. Severe harvest restrictions will be required to maintain current bear densities in the Forest Region if a catastrophic loss of beech occurred. Consequently, greater knowledge of forestry methods to maintain beech mast production, and reduce the likelihood of disease-caused mortality of beech trees, is needed. In the Forest-Farm Region (WMD 3, 6, 11-13, 15-17, 20-23, and 25-28), an incremental decline in habitat quality due to residential and recreational development is expected. With continued human tolerance for bears, the habitat of the Forest-Farm Region should be capable of supporting present (1999) bear densities throughout the 15-year planning period.

Possible Consequences: Given present habitat conditions and bear productivity, the increased hunting opportunity required to stabilize population growth should be welcomed by bear hunters, and their satisfaction should rise. If additional nonresident hunters participate in the hunt, their use of local services and employment of guides will translate into increased income for rural economies. However, lengthened bear hunting seasons may result in conflicts with other forest uses, including hunters pursuing other species, fishermen, campers, and sightseers. Extended bait hunting periods may generate conflict between baiters and houndsmen. Therefore, multiple-bear bag limits may be preferable for increasing harvests and minimizing conflicts among user groups. Depending on the structure of the season, there may be increased opposition to bear hunting by antihunting advocates. If there is a widespread loss of beech trees, the resulting drastic curtailment of hunting opportunity would cause dissatisfaction among all bear hunters, and loss of business for registered guides that cater to nonresident hunters.

Objective 2: Create information and education programs by 2002 that target specific audiences and promote traditional hunting and trapping methods as valid and preferred tools to manage black bear populations in Maine.

<u>Desirability</u>: This objective is highly desirable, as it would increase support for traditional management of bears in Maine, both within the hunting community, and in the greater public arena. Public support for hunting of bears with dogs and bait has been eroding in other North American jurisdictions. Hunting over bait is widely practiced in Maine, producing sufficient hunter success to generate predictably large bear harvests needed to control bear population growth in the State. Relatively few individuals practice hunting bears with dogs, and they consistently account for about 15% of the annual bear harvest. Maine provides the most opportunity for hunting bears with hounds in the Eastern United States. Both hunting methods provide hunters with greater opportunity to be selective than still hunting or stalking. Consequently, harvests over bait or dogs are consistently composed of mostly adult bears. By retaining both hunting methods, the Department may be able to achieve bear harvests sufficiently large enough to stabilize population growth.

Feasibility: This objective is feasible, given adequate staff and funding.

Capability of Habitat: Not applicable.

<u>Possible Consequences</u>: Positive consequences are increased communication and support for agency programs from the hunting community, greater understanding of the role of hunting in wildlife management, and greater acceptance of sustained yield management concepts throughout the public. A potential negative consequence is increased visibility and discussion of issues surrounding the ethics of hunting bears, particularly the use of hounds and bait.

<u>Objective 3</u>: Create information and education programs by 2002 that target specific audiences and promote public tolerance of bears in Maine.

<u>Desirability</u>: Highly desirable to maintain the public's support for the agency's programs, and promote the positive values of bears (e.g., symbols of wilderness and recreational values), as opposed to allowing bears to be simply viewed as nuisance animals.

Feasibility: Can be accomplished, given adequate funding.

Capability of Habitat: Not applicable.

<u>Possible Consequences</u>: Greater understanding and support for the agency's bear management efforts by the general public.

For Wildlife Management District 29

Goal: Provide hunting, trapping and viewing opportunity for bears.

Objective 1: Increase the traditional hunting and trapping effort on bears within the existing season framework to reduce fawn mortality by 15% by (date - to be determined by IF&W). Suggestion: Reduce bear density by 50% over 2 years, then maintain reduced density for 5 years and measure fawn mortality to detect change.

<u>Desirability</u>: The objective of reducing bear populations in the region may be desirable for public interests concerned with deer population status, but is probably not desirable for bear hunters and Registered Maine Guides that hunt in WMD 29. Following a short-term increase in hunting opportunity and harvests, future bear hunting opportunity and success may be reduced in the region, with lower hunter satisfaction. If fewer nonresident hunters use the services of registered guides, it will reduce bear hunting revenues in the region.

<u>Feasibility</u>: Initial reduction of bear numbers will require substantial liberalization of hunting regulations in the form of longer hunting and trapping seasons, and necessitate taking several bears per licensee. Maintenance of the reduced bear density level by legal hunting and trapping may be difficult, given the expectation of reduced hunter success in the area. Cost to monitor bear densities: \$56,000+. Cost to monitor fawn survival and deer density: minimal.

<u>Capability of Habitat</u>: The population objective for deer in WMD 29 is 15 deer/mi². Current habitat (e.g., amount of deer wintering area) may not be able to support more than 9 deer/mi².

<u>Possible Consequences</u>: There may be a lack of support for this bear management approach by bear hunters, registered Maine guides, and the nonhunting public unless the Department precedes the reduction of bear numbers with an educational campaign that explains the rationale of the program, and how it will benefit wildlife and people in the affected WMD. This lack of support may translate into media attention that could jeopardize bear hunting statewide. Conversely, there may be considerable support for reducing bear populations by local deer hunters that want increased opportunity to hunt deer in WMD 29. Expectation is for a short-term increase in revenue generated by the liberalized hunting opportunity and elevated hunting effort in WMD 29, followed by a longer-term reduction in revenue as hunter success declines with reduced bear density.

<u>Objective 2</u>: Create information and education programs by 2002 that target specific audiences and promote traditional hunting and trapping methods as valid and preferred tools to manage black bear populations in Maine.

<u>Desirability</u>: This objective is highly desirable, as it would increase support for traditional management of bears in Maine, both within the hunting community, and in the greater public arena. Public support for hunting of bears with dogs and bait has been eroding in other North American jurisdictions. Hunting over bait is widely practiced in Maine, producing sufficient hunter success to generate predictably large bear harvests needed to control bear population growth in the State. Relatively few individuals practice hunting bears with dogs, and they consistently account for about 15% of the annual bear harvest. Maine provides the most opportunity for hunting bears with hounds in the Eastern United States. Both hunting methods provide hunters with greater opportunity to be selective than still hunting or stalking. Consequently, harvests over bait or dogs are consistently composed of mostly adult bears. By retaining both hunting methods, the Department may be able to achieve bear harvests sufficiently large enough to stabilize population growth.

Feasibility: This objective is feasible, given adequate staff and funding.

Capability of Habitat: Not applicable.

<u>Possible Consequences</u>: Positive consequences are increased communication and support for agency programs from the hunting community, greater understanding of the role of hunting in wildlife management, and greater acceptance of sustained yield management concepts throughout the public. A potential negative consequence is increased visibility and discussion of issues surrounding the ethics of hunting bears, particularly the use of hounds and bait.

<u>Objective 3</u>: Create information and education programs by 2002 that target specific audiences and promote public tolerance of bears in Maine.

<u>Desirability</u>: Highly desirable to maintain the public's support for the agency's programs, and promote the positive values of bears (e.g., symbols of wilderness and recreational values), as opposed to allowing bears to be simply viewed as nuisance animals.

Feasibility: Can be accomplished, given adequate funding.

Capability of Habitat: Not applicable.

<u>Possible Consequences</u>: Greater understanding and support for the agency's bear management efforts by the general public.